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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,350	10/11/2001	Martin J. Jacobs	CP215	9510

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CEPHALON, INC.
41 MOORES ROAD
PO BOX 4011
FRAZER, PA 19355

EXAMINER	
FUBARA, BLESSING M	
ART UNIT	PAPER NUMBER
1618	
MAIL DATE	DELIVERY MODE
09/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/975,350	JACOBS ET AL.	
	Examiner	Art Unit	
	BLESSING M. FUBARA	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,8-13,15-43,45-50,55-60 and 63-66* is/are pending in the application.

4a) Of the above claim(s) *36-43,56-58,60,64 and 65* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,8-13,15-35,45-50,55,59,63 and 66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of request for continued examination under 37 CFR 1.114 filed 7/09/08, amendment and remarks filed 6/2/08. Claims 1, 15, 41 and 42 are amended. Claims 14, 67 and 68 are canceled. Claims 1, 3, 4, 8-13, 15-43, 45-50, 55-60 and 63-66 are pending. Claims 36-43, 56, 57, 58, 60, 64 and 65 were withdrawn from consideration and are withdrawn from consideration.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/09/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3, 4, 8-13, 15, 17-35, 45-47, 55, 59, 63 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Esteve et al. (US 6,566,404 B2 as English translation for WO 99/25329) or in view of applicant's admitted prior art.

5. Claim 1 has been amended to state that the composition is a liquid solution.

Nguyen teaches a pharmaceutical composition comprising particles or microparticles of active ingredient, physiologically acceptable hydrophilic excipient and water (abstract). The hydrophilic excipient comprises a polymer component and a water-soluble or water dispersible component that acts as a diluent (column 6, lines 1-5). The polymer component is selected from the group consisting of gum Arabic, xanthan gum, gum tragacanth, alginates, pectinates, polyvinylpyrrolidone, polyethylene glycols, cellulose, carboxymethyl cellulose, cellulose ethers, carboxymethyl chitin, dextran, chitosan, gelatin, acrylic and methacrylic polymers and copolymers, colloidal silica and mixtures thereof (column 6, lines 11-23). The polyethylene glycol meets claim 15. The water-soluble or water dispersible component is selected from the group consisting of lactose, glycocoll, mannitol, glucose, sucrose, maltodextrin, cyclodextrins and derivatives thereof (column 6, lines 44-49). The hydrophilic excipients can also comprise surfactants that are capable of oral administration and the surfactants can be polysorbates, sorbitan esters, fatty glyceride polyethers, lecithins, sodium lauryl sulfate, sodium dioctylsulfosuccinate and mixtures thereof (column 7, lines 2-7) meeting surfactant requirements

of claims 8-13, 19, 21-31. The process of preparing the modafinil particles involves homogenization of the active ingredient in solution, suspension, or emulsion and freeze-drying or lyophilization (column 8, lines 15-24) and the modafinil meets claims 1, 3, 17, 18-20, 32-35, 45, 55, 63, 66. The active ingredient is selected from the group consisting of paracetamol, probucol, piroxicam, phloroglucinol, tiadenol, flerobuterol, modafinil, dexfenfluramine, carbinoxamine maleate, loperamide, lorazepam and mixtures thereof (claim 13). Claims 45-47 recite the properties of the composition; and oral administration is route of administration and route of administration of a composition is does not patentably distinguish the claimed composition over the prior art since the composition of Nguyen, a modafinil composition is capable of being orally administered; specifically lyophilized product of Nguyen contains surfactants capable of oral administration (column 7, lines 3-7). Thus, Nguyen specifically envisions oral administration and since the excipients listed are pharmaceutically acceptable, it flows that the modafinil composition of Nguyen is pharmaceutically acceptable and claim 4 is met.

The preparation is lyophilized such that the amount of water is driven to a minimum and would be less than 10% meeting the non-aqueous nature of claim 1 (as gleaned from applicant's specification at paragraph [0020] of the published specification describing non-aqueous composition). Regarding the amounts of surfactant in claims 8, 9, 23-25, 27-30; and regarding the amount of modafinil in claims 17 and 18, it is within the purview of the artisan to use amounts of surfactants and modafinil in the composition to provide the desired composition. However, Nguyen is silent on the optical character of the modafinil. But it is known in the art that modafinil in the absence of designation of d- or l-, is the racemic form comprises of the l- or

d- form. In the absence of factual evidence, the use of the specific l-form of the modafinil is not inventive over the use of the racemic form.

Nguyen does not teach a liquid composition. However, it is known to formulate modafinil as liquid solutions according to applicant's admitted prior art (instant specification at paragraphs [0006] and [0007] of the published application and Esteve (see column 2, line 58; column 3, lines 9-16). Furthermore, Nguyen teaches using organic solvent such as polyethylene glycol as described above. Therefore, since liquid modafinil formulations are known in the art as noted above, and taking the teachings of the references together and all the critical elements being taught, one having ordinary skill in the art at the time the invention was made would have reasonable expectation of success that the lyophilized product of Nguyen can be successfully reconstituted as a liquid formulation.

Response to Arguments

6. Applicant's arguments filed 6/02/08 and entered with the filing of the RCE have been fully considered but they are not persuasive.

7. Applicant argument Nguyen does not teach liquid composition has been considered and the examiner agrees with applicant that Nguyen does not teach a liquid composition and that is why the rejection under 35 USC 102 has been dropped and a rejection under 35 USC 103(a) is made over Nguyen in view of applicant's admitted prior art that liquid modafinil compositions are known.

8. Claims 1, 3, 4, 8-13, 15, 17-35, 45-47, 55, 59, 63 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Shah et al. ("Self-emulsifying drug delivery systems (SEDDS) with polyglycolized glycerides for improving in

vitro dissolution and oral absorption of lipophilic drugs," in international Journal of Pharmaceutics, 106 (1994), pp 15-23) or Charman et al. ("Self-emulsifying Drug Delivery Systems: Formulation and Pharmaceutical Evaluation of an Investigational Lipophilic Compound," in Pharmaceutical Research, Vol. 9, No. 1, 1992, pp 87-93).

9. Nguyen has been described above as rendering obvious the designated claims except that, Nguyen failed to specifically teach liquid formulation containing modafinil. Modafinil is a lipophilic drug or is a drug that is insoluble in water as evidenced by column 1, lines 32-35 of US 6,348,500 B1). However, Charman and Shah individually each disclose the formulation of poorly water soluble drugs using self-emulsifying drug delivery systems (see the whole publications, with emphasis on Table 2 and page 18, left column of the Shah reference and page 88 of Charman). Therefore, taking the general teachings of the references, one having ordinary skill in the art at the time the invention was made would have reasonable expectation of success that adapting the teachings of Shah or Charman in formulating the modafinil composition of Nguyen would produce a self emulsifying formulation of modafinil in liquid form that after oral administration would readily disperse in the stomach to form fine emulsion.

10. Claims 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Shah et al. ("Self-emulsifying drug delivery systems (SEDDS) with polyglycolized glycerides for improving in vitro dissolution and oral absorption of lipophilic drugs," in international Journal of Pharmaceutics, 106 (1994), pp 15-23).

Nguyen in view of Shah is described above as rendering obvious the liquid formulation of claims 1 and 47. Nguyen teaches all the critical elements of the claims except that the formulation of Nguyen is not an encapsulated liquid. But Shah teaches soft gelatin capsules

containing liquid compositions of lipophilic drugs (see the entire publication with emphasis on page 18 and Table 2). Therefore, one having ordinary skill in the art at the invention was made would have reasonable expectation of success that adapting the teachings of Shah in formulating the modafinil composition of Nguyen, liquid compositions of modafinil encapsulated in soft gelatin capsules would produce a self emulsifying formulation of modafinil in liquid form in gelatin capsules that after oral administration would readily disperse in the stomach to form fine emulsion.

11. Claims 1, 3, 4, 8-13, 15, 17-35, 45-50, 55, 59, 63 and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Grebow et al. (US 5,618,845).

12. Nguyen has been described above. Nguyen teaches all the critical elements of the claims. Nguyen does not specifically teach a liquid formulation.

Grebow teaches a pharmaceutical composition comprising modafinil particles or modafinil pharmaceutically acceptable salt particles (abstract, column 2, column 3, lines 1-55 and claims 1 and 2) and non-toxic pharmaceutically acceptable carrier (column 4, lines 4-1%. Grebow's composition contains an appropriate dosage of between 50 mg and 700 mg of modafinil with a preferred amount of 400 mg (column 4, lines 1 1-18 and column 10, lines 15-17). The modafinil pharmaceutical composition is administered as a tablet, capsule, powder, pill, liquid, suspension or emulsion; the modafinil composition can also be administered topically via epidermal patch or administered via direct injection (column 10, lines 18-26). Grebow further teaches a method of altering somnolent state, for example, narcolepsy, idiopathic hypersomnia and related sleep disorders by administering to a mammal a pharmaceutical

composition comprising an effective amount of modafinil particles; and an effective amount of the pharmaceutical composition is defined as an amount effective for treating the somnolent state (column 3, lines 56-67). In human clinical trials, modafinil is administered to physically and mentally healthy male subjects (column 5, lines 46 to 56). Regarding claim 67, Grebow teaches liquid or suspension or emulsion composition of modafinil.

The composition of Grebow encompasses stable and unstable suspensions because the prior art does not exclude stable suspensions and thus the suspension of Grebow would be inherently stable. It is also noted that Grebow discloses suspensions containing modafinil and in the suspension modafinil is not crystalline and the particles of modafinil are suspended in the solvent. The composition of Grebow can also be administered as a liquid as described above which meets the limitation of claim 1 requiring a liquid composition. Regarding claims 48-50, the modafinil composition of Grebow is encapsulated and would therefore meet claim 48 with the generic teaching of capsule encompasses hard and soft capsules of claims 49 and 50.

Grebow also teaches administering the prior art composition in clinical trials to mentally and physically healthy male subjects. Orally administering modafinil particles to human subjects (column 5, lines 46-56) would necessarily bring modafinil particles in contact with the aqueous environment in the human subject since human body is mostly water. the prior art is silent on the form of the capsule. Since the prior art is silent on the form of the capsule, hard or soft gelatin capsule, the prior art broad teaching of a capsule encompasses both soft gelatin capsule or hard capsule. The expected result would be the encapsulation of modafinil particle in soft or hard gelatin capsule meeting claims 48-50. Therefore, regarding

soft or hard capsule, one of ordinary skill in the art is capable of encapsulating the composition in hard or soft in hard capsule or soft gelatin capsule.

Nguyen teaches all the critical elements of the claims. Nguyen does not specifically teach a liquid formulation. Grebow teaches liquid formulation of modafinil. Therefore, one having ordinary skill in the art at the time the invention was made would have reasonable expectation of success that the teaching of Grebow can be adapted to successfully prepare liquid formulation of modafinil as anticipated by Grebow. One having ordinary skilled artisan would have reasonable expectation of success to encapsulate the product of Nguyen for oral administration.

Response to Arguments

13. Applicant's arguments filed 06/02/2008 have been fully considered but they are not persuasive.

14. Applicant argues that Nguyen does not teach or suggest non aqueous liquid solution containing modafinil and that Grebow fails to cure the deficiencies of Nguyen; that the Grebow reference is concerned discrete particles of modafinil and not solutions and that there is no motivation to modify the Grebow disclosure.

15. The examiner agrees with the applicant that Nguyen does not teach liquid formulation of modafinil and that is why a rejection under 35 USC 102 is not made. However, applicant's arguments as it regards Grebow are not persuasive because Grebow envisions administering the formulation as a liquid or suspension (see column 10, lines 18-21). Therefore, Grebow cures the deficiencies of Nguyen. Further, modification of Grebow is not required because Grebow is relied upon to show that modafinil composition in liquid or emulsion form can be encapsulated

so that the ordinary skilled artisan would have reasonable expectation of success to encapsulate the product of Nguyen for oral administration. Modification of Grebow is not required because, Grebow is a not the primary reference and encapsulation of the product of Nguyen does not lead to dissolution of the particles of Grebow.

Claim 1 is a non-aqueous composition comprising modafinil compound and at least one surfactant with the composition having the characteristic that it would form an aqueous, liquid, homogeneous, stable composition of non-crystalline particles when contacted with an aqueous medium. The composition of Nguyen is a non aqueous solution comprising modafinil and surfactant and would inherently have the characteristic that when it is contacted with aqueous medium it would inherently form aqueous, liquid, homogeneous, stable composition of non-crystalline particles.

16. Claims 1, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (US 5,843,347) in view of Grebow et al. (US 5,618,845) and further in view of Hochlowski et al. (US 5,589,485).

17. Nguyen in view of Grebow have been described above to render over the liquid composition of claims 1 and 15. However, the composition of Nguyen in view of Grebow does not contain a further solvent or diluent according to claim 16. But, it is known that liquid formulations contain commonly used inert diluents such as benzyl alcohol, oils, propylene glycol and polyethylene glycols in addition to the active agent according to Hochlowski (see column 5, lines 35-43). Therefore, taking the teachings of the prior art references, one having ordinary skill in the art at the time the invention was made would reasonably expect that adding inert diluent such as benzyl alcohol or oils or propylene glycol to the composition of Nguyen as

modified by the teaching of Grebow may further stabilize the liquid formulation as a preservative.

Double Patenting

18. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

19. Claims 1, 3, 4, 8-13, 15, 17-35, 45-50, 55, 59, 63 and 66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-29 and 35-39 of U.S. Patent No. 6,489,363. An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim not is patentably distinct from the reference claim(s) because the examined claim is either anticipated, or would have been obvious, over the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir.

1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other because the issued claims anticipate the examined claims even though the claims are not word for what.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BLESSING M. FUBARA whose telephone number is (571)272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Blessing M. Fubara/
Examiner, Art Unit 1618